



Jiang, the lifetime of the carriers is 5 picoseconds (Col. 9, lines 37-42), while the time for laser energy to make a roundtrip of the cavity is on the order of 10-100 nanoseconds (Col. 5, lines 23-26.) Jiang's R-PFSA is thus fast, not slow.

Jiang also teaches directly away from Q-switching a laser, specifically teaching the use of a fast, two-photon absorber (TPA) to suppress Q-switching and promote cw modelocking. (Abstract and Col. 6, lines 50-55.)

Birnbaum is not capable of combination with Jiang. Jiang specifically teaches the suppression of Q-switching to promote cw modelocking and only discloses a fast SA. Birnbaum, on the other hand, is directed to Q-switching and slow saturable absorbers. There is no teaching or suggestion in any of the cited references to combine these two disparate references, Jiang and Birnbaum. In fact, Jiang teaches away from doing what is described in Birnbaum. Therefore, the Office Action fails to meet a fundamental requirement for establishing a *prima facie* case of obviousness; namely, a teaching or suggestion to combine or modify the references. (M.P.E.P. §2143.) The present Office Action "picks and chooses" elements from multiple references with little regard for compatibility of the references or whether the references suggest the combination/modification.

Moreover, as indicated at M.P.E.P. §2143.01, "the proposed modification cannot render cannot change the principle of operation of a reference." The Office Action's proposed modification of Jiang in view of Birnbaum, however, does exactly what is prohibited. The proposed modification of Jiang would change the very principle of Jiang, which is the use of a fast SA to suppress Q-switching. Accordingly, neither Jiang nor Birnbaum, alone teaches or suggests the present claims.

Kalyanaraman also teaches a fast SA that is composed of a solid dye solution. (Col. 1, line 64 to Col. 2, line 3 and lines 55-65.) Kalyanaraman does not address the deficiencies of Jiang and Birnbaum. Moreover, Kalyanaraman is provided, according to the Office Action, to suggest a pulse power range and pulse duration. There is no support in the Office Action to substantiate that



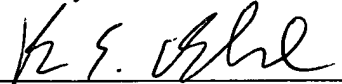
The Office Action asserts that claim 1 of U.S. Patent No. 6,546,027, discloses the following elements of the present claims: "wherein at least one of an orientation and a location of the SA element is variable" and "wherein the output pulse duration of can be varied by varying at least one of the orientation and location of the SA element." This assertion is incorrect.

None of the cited claims of the '027 patent teach or suggest these claim elements. If this rejection is maintained, the Applicant respectfully requests that reasoning be provided to explain why the recited claim elements are obvious in view of the claims of the '027 patent, which do not teach or suggest such claim elements. Otherwise, the Applicant respectfully requests that this rejection of claims 1-6 and 10-13 be withdrawn.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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Respectfully submitted,

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